

REMARKS/ARGUMENTS

Applicants would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office Action, and amended as necessary to more clearly and particularly describe the subject matter that Applicants regard as the invention.

Claims 1, 6, 13, and 14 are amended and claims 15-19 are new and fully supported by the specification as originally filed.

Claims 1–12 and 14 are rejected under 35 U.S.C. 101 for being directed to non-statutory subject matter. Claim 1, from which claims 2–12 depend, and claim 14 have been amended as indicated above to explicitly clarify that the second simulation executing step yields a second simulation result. The Examiner contends that “executing a simulation of the second step does not produce a result that is stored or conveyed to the user” or that the results obtained are not a “real world result” (see Paper No. 20070223); and therefore, the subject claims are not patentable subject matter. Applicants respectfully disagree for at least the following reasons. Contrary to the Examiner’s contentions, the Federal Circuit in *Eolas Technologies Inc. v. Microsoft Corp.* held that software alone constitutes patentable subject matter.

The next section in Title 35, section 101, explains that an invention includes “any new and useful process, machine, manufacture or composition of matter.” 35 U.S.C. §101 (2000). ***Without question, software code alone qualifies as an invention eligible for patenting under these categories, at least as processes.*** See *In re Alappat*, 33 F.3d 1526 (Fed.Cir.1994); *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed.Cir.1999); MPEP §2106.IV.B.1.a. (8th ed., rev. 2 2001) (*quoting Eolas Technologies Inc. v. Microsoft Corp.*, 399 F.2d 1325, 1338 (Fed.Cir.2005)) (emphasis added).

Moreover, the claims clearly recite statutory subject matter pursuant to the legal standard set forth in *AT&T v. Excel Communications*, 172 F.3d 1352 (Fed.Cir.1999). In this case, the Court held that the claims corresponding to an invention is statutory if the claimed invention produces a ***useful, concrete, tangible result***. See *Id.* at 1358. More specifically, claim 1

provides for a mounting process simulation program that is recorded on a computer-readable medium that executes the simulation of a mounting process based on a plurality of conditions which involves multiple steps. The steps, as they are performed in the claimed manner constitute or describe a manner in which a simulation of the mounting process is performed in order to produce a result based on the simulation. Such a result is clearly a useful, concrete and tangible result that undoubtedly provides a use in the real world. The cited case law, at the very least, does not require the results obtained from performance of a method or execution of a computer or software program to be a “real world result”. *Eolas* explicitly makes it clear that *software code alone qualifies as an invention eligible for patenting ... at least as processes*. Simulations and results obtained from such simulated events as claimed herein are but one example of subject matter covered or addressed by computer processes and not excluded by the case law.

Claim 14 recites similar language. In addition, claim 6 which depends from claim 1 describes in part “...displaying three-dimensionally an animation to indicate a result simulated in the second simulation executing step on a display device...” Thus, claims 1–12 and 14 constitute statutory subject matter, and withdrawal of the rejection is respectfully requested.

Claims 1–14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sarvar et al. – *Effective Modeling of the Reflow Soldering Process: Basis, Construction, and Operation of a Process Model*. Applicants respectfully disagree for at least the following reasons. Regarding claims 1 and 14 and claims 2–12 which depend from claim 1, Sarvar et al. does not teach ...executing a simulation based on a first condition selected for a first step; ...selecting a simulated result from the first simulation executing step as a simulation condition for a second step; and **...executing a simulation of the second step based on a second condition comprising the simulation condition and at least a third condition that yields a second**

simulation result. Instead, Sarvar et al. teaches simulating peak temperature based on specific heat data which is empirically derived. Sarvar fails to disclose executing a simulation of the second step based on a second condition, wherein the **second condition comprises the simulation condition and at least a third condition** in order to yield a second simulation result, as claimed herein.

Regarding claim 13, Sarvar et al. does not teach a mounting process simulation system that includes, among other things, an executing portion for executing the simulation based on condition input from the inputting portion wherein the executing portion includes a simulation result outputting portion that executes the simulation of the second step based on condition data **from the condition table and a condition input from the inputting portion.** Therefore, the second simulation is based on two conditions – one from the condition table and one from the inputting portion. Unlike claim 13, Sarvar et al. relates to empirically deriving varying specific heat capacity values and then simulating a peak temperature based on each empirically derived value. Thus, Sarvar does not teach each and every element as set forth in claim 13 as well as claims 1-12 and 14.

In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

Appln. No. 10/767,658
Amendment dated April 20, 2007
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If there are any additional fees resulting from this communication, please charge same to
our Deposit Account No. 16-0820, our Order No. 36409.

Respectfully submitted,
PEARNE & GORDON, LLP

Date: April 20, 2007

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